UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,264	12/12/2003	Hideo Hoshuyama	118019	8658

25944   7590   11/20/2007
OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER
TSAI, TSUNG YIN

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
11/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
Office Action Summary		10/733,264	HOSHUYAMA, HIDEO
		Examiner	Art Unit	
		Tsung-Yin Tsai	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 November 2007</u>.

2a)☒ This action is **FINAL**.　　　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-7 and 9</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-7 and 9</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>29 June 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All　b)☐ Some * c)☐ None of:

　　　1.☒ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date <u>10/25/2007</u>.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAIL ACTION

Acknowledge of amendment received on 11/2/2007 and made of record.

Acknowledge of amendment to claims 1-3, 6-7 and 9.

Acknowledge of canceling claim 8.

Acknowledge of new IDS submitted on 10/25/2007.

Response to Arguments

Applicant's argument – Amended claim 2 as requested by Examiner to overcome

rejection.

Examiner's response – Objection to claim 2 withdrawn.

Applicant's argument – Amended claim 3 as requested by Examiner to overcome 35

USC 112 second paragraph rejection.

Examiner's response – 35 USC 112, second paragraph, rejections withdrawn.

Applicant's argument – Cancel claim 8.

Examiner's response – 35 USC 101 Rejection for claim 8 withdrawn due to

cancellation of claim 8.

Applicant's argument – Page 7, Hirai does not disclose or suggest a plurality of small areas with each small area consisting of a plurality of pixels, combined with the other features, recited in independent claims 1, 6 and 9.

Examiner's response – Hirai teaches plurality of small areas (figure 4B disclose the image that is taken, where small areas are mark from A0 to A5) **each consisting of plurality of pixels (**figure 4B disclose the image that is taken, where small areas are mark from A0 to A5 these small areas covers a region of the image data, and these regions are consist of plurality of pixel values, figure 6 discloses where the image is digitalize in order to be store in EEPROM and RAM memory, figure 17 discloses the RGB and CYM color values for the image).

Applicant's argument – Page 7, Because claims 2, 4 and 7 incorporate the features of independent claims 1 and 6, these claims are patentable over Hirai for at least these reasons, as well as for the additional features these claims recite.

Examiner's response – Hirai teaches regarding plurality of small areas with each small area consisting of a plurality of pixels, such that all dependent claims are rejected as well.

Claim Rejections – 35 USC 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1-2, 4, 6 and 7-9 are rejected under 35 U.S.C. 102(b) as being

unpatentable over Hirai et al (US 2001/0003557 A1).

Hirai et al disclose a image-processing device (title, abstract), also seen as a

digital still camera (title, abstract, figure 1), carrying out the method (abstract, figures 7-

16, 18-20 and 22) comprising:

(1) Regarding claims 1 and 6:

an image information generating part (page 1 paragraph 0005. The

colorimetry system is seen as the information generating part) for dividing an

image (figure 23, page 1 paragraph 0005) to be processed into a plurality of

small areas (page 1 paragraph 0005 shows the colorimetry system divides the

original image to sections), **said small areas (**figure 4B disclose the image that

is taken, where small areas are mark from A0 to A5**) each consisting of**

plurality of pixels (figure 4B disclose the image that is taken, where small areas

are mark from A0 to A5 these small areas covers a region of the image data, and

these regions are consist of plurality of pixel values, figure 6 discloses where the

image is digitalize in order to be store in EEPROM and RAM memory, figure 17

discloses the RGB and CYM color values for the image**),** and for generating, for

each of said small areas, image information indicating a characteristic of the

image (page 1 paragraph 0005, page 2 paragraphs 0013-0015, page 8 claims 1-

2. Varies type of characteristic of the image will be look at; the lighting exposure,

measurement of the color red, green and blue.);

an evaluation value determining part (page 1 paragraphs 0007-0008. The

compensation amount determining system is the system that will carry on the

process like light meter measuring and exposure measuring) for determining an

evaluation value (figure 7, page 1 paragraph 0010, page 3 paragraphs 0044-

0045 and 0049. Luminosity values are compensated by filter and process from

analog value to digital values) according to the image information generated for

each of said small areas (page 1 paragraph 0005) and to the image information

generated for each of small areas adjacent to the each of said small areas (figure

23, page 1 paragraph 0005), the evaluation value indicating luminosity of each of

the pixels (page 3 paragraph 0044-0045, 0049. Brightness value, Bvad, is

measure and calculated) constituting the image; and

an image-processing part (page 3 paragraph 0046, 0049-0050 and 0057.

There are various parts that take image data for output; LCD panel 21 and the

controller 20) for performing an image processing on each of the pixels (figure 6

and page 3 paragraph 0045 shows processing of the image processing. Page 3

paragraph 0050 show exposure value calculation procedure according to the

brightness value Bvd. Page 3 paragraph 0046 shows image processing as a

display of the LCD panel 24) of the image according to the evaluation value

(figure 7, page 1 paragraph 0010, page 3 paragraphs 0044-0045 and 0049.

Luminosity values are compensated by filter and process from analog value to

digital values) determined by said evaluation value determining part (page 1 paragraphs 0007-0008. The compensation amount determining system is the system that will carry on the process like light meter measuring and exposure measuring).

(2) Regarding claim 2:

wherein said image-processing part (page 3 paragraph 0046, 0049-0050 and 0057. There are various parts that take image data for output; LCD panel 21 and the controller 20) includes **the luminance level** correcting part (page 1 paragraph 0007 show a compensation amount determining system that processes exposure level on each divided area. Page 1 paragraph 0008 shows a light measuring system that measures the incoming luminance level on incoming data. Page 3 paragraph 0044 shows remaining sensor 9D that is provided with a luminosity compensating figure the select the range of desire wavelength of incoming light exposure. Page 3 paragraph 0050 shows at step S15 an "exposure value calculation procedure" that is executed bas on the brightness value Bvd) for correcting a luminance level of the image; and

said luminance level correcting part (page 1 paragraph 0007 show a compensation amount determining system that processes exposure level on each divided area. Page 1 paragraph 0008 shows a light measuring system that measures the incoming luminance level on incoming data. Page 3 paragraph 0044 shows remaining sensor 9D that is provided with a luminosity compensating figure the select the range of desire wavelength of incoming light

exposure. Page 3 paragraph 0050 shows at step S15 an "exposure value

calculation procedure" that is executed bas on the brightness value Bvd)

determines a luminance level correcting coefficient (page 3 paragraph 0049

shows a Bvd value, that is seen as the correcting coefficient, with will be use by

operation S20 executed by the controller 20, page 3 paragraph 0050 shows the

value Bvd, which is obtain for the "exposure value calculation procedure", page 4

paragraph 0057 shows that the value Bvd response to adjustment of the

brightness value) used for the luminance level correction according to the

evaluation value (figure 7, page 1 paragraph 0010, page 3 paragraphs 0044-

0045 and 0049. Luminosity values are compensated by filter and process from

analog value to digital values) for each of said pixels determined by said

evaluation value determining part (page 1 paragraphs 0007-0008. The

compensation amount determining system is the system that will carry on the

process like light meter measuring and exposure measuring) so as to perform a

luminance level correction (page 1 paragraph 0007 show a compensation

amount determining system that processes exposure level on each divided area.

Page 1 paragraph 0008 shows a light measuring system that measures the

incoming luminance level on incoming data. Page 3 paragraph 0044 shows

remaining sensor 9D that is provided with a luminosity compensating figure the

select the range of desire wavelength of incoming light exposure. Page 3

paragraph 0050 shows at step S15 an "exposure value calculation procedure"

that is executed bas on the brightness value Bvd) processing on each of said

pixels by using the coefficient (page 3 paragraph 0049 shows a Bvd value, that is

seen as the correcting coefficient, with will be use by operation S20 executed by

the controller 20. Page 3 paragraph 0050 shows the value Bvd, which is obtain

for the "exposure value calculation procedure". Page 4 paragraph 0057 shows

that the value Bvd response to adjustment of the brightness value).

(3) Regarding claim 4:

wherein said evaluation value determining part (page 1 paragraphs 0007-

0008. The compensation amount determining system is the system that will carry

on the process like light meter measuring and exposure measuring) performs a

pre-correction processing (page 1 paragraph 0008 shows a light metering system

which is seen as a pre-correcting processing system before the image is taken.

Page 3 paragraph 0044 shows a luminosity compensating filter, which only let in

certain wavelength rage as well as the normal light detecting sensor is also seen

as a pre-correcting processing system) on the image information (page 1

paragraph 0005, page 2 paragraphs 0013-0015, page 8 claims 1-2. Varies type

of characteristic of the image will be look at; the lighting exposure, measurement

of the color red, green and blue) for each of said small areas ((page 1 paragraph

0005. The colorimetry system divides the original image to sections) generated

by said image information generating part (page 1 paragraph 0005. The

colorimetry system is seen as the information generating part) in accordance with

a characteristic of a photo-taking lens (page 3 paragraph 0044 show filter lens

letting in selected wavelengths) used for generating the image, and then

determines the evaluation value (figure 7, page 1 paragraph 0010, page 3

paragraphs 0044-0045 and 0049. Luminosity values are compensated by filter

and process from analog value to digital values) according to the pre-corrected

image information (page 1 paragraph 0008 shows a light metering system which

is seen as a pre-correcting processing system before the image is taken. Page 3

paragraph 0044 shows a luminosity compensating filter, which only let in certain

wavelength rage as well as the normal light detecting sensor is also seen as a

pre-correcting processing system) for each of said small areas (page 1

paragraph 0005 shows colorimetry system divides the original image to

sections).

(4) Regarding claim 7:

further comprising a divisional photometry part (figure 1, figure 23, page 1

paragraph 0005 show a photometry area into a plurality of area, page 1

paragraph 0007) for dividing a subject field into a plurality of photometry areas

(page 1 paragraph 0005 shows the colorimetry system divides the original image

to sections) and performing photometry for each of the photometry areas (page 1

paragraph 0005 show that photometry area in plurality of areas and colorimetry is

performed on these areas, page 1 paragraph 0010 shows that exposure

compensation amount is perform on the plurality of photometry areas), wherein

said image information generating part (page 1 paragraph 0005. The colorimetry

system is seen as the information generating part) generates the image

information (page 1 paragraph 0005, page 2 paragraphs 0013-0015 and page 8

claims 1-2. Varies type of characteristic of the image will be look at; the lighting

exposure, measurement of the color red, green and blue) based on information

obtained from said divisional photometry part (figure 1, figure 23, page 1

paragraph 0005 show a photometry area into a plurality of area, page 1

paragraph 0007).

(5) Regarding claim 9:

dividing an image to be processed into a plurality of small areas (figure 23,

page 1 paragraph 0005), **said small areas** (figure 4B disclose the image that is

taken, where small areas are mark from A0 to A5) **each consisting of plurality**

of pixels (figure 4B disclose the image that is taken, where small areas are mark

from A0 to A5 these small areas covers a region of the image data, and these

regions are consist of plurality of pixel values, figure 6 discloses where the image

is digitalize in order to be store in EEPROM and RAM memory, figure 17

discloses the RGB and CYM color values for the image), and for generating, for

each of said small areas, image information indicating a characteristic of the

image (page 1 paragraph 0005, page 2 paragraphs 0013-0015, page 8 claims 1-

2. Varies type of characteristic of the image will be look at; the lighting exposure,

measurement of the color red, green and blue);

determining an evaluation value (figure 7, page 1 paragraph 0010, page 3

paragraphs 0044-0045 and 0049. Luminosity values are compensated by filter

and process from analog value to digital values) according to the image

information generated (page 3 paragraph 0046, 0049-0050 and 0057. There are

various parts that take image data for output; LCD panel 21 and the controller 20)

for each of said small areas and the image information generated for each of

small areas (figure 6 and page 3 paragraph 0045 shows processing of the image

processing. Page 3 paragraph 0050 show exposure value calculation procedure

according to the brightness value Bvd. Page 3 paragraph 0046 shows image

processing as a display of the LCD panel 24) adjacent to the each of said small

areas, the evaluation value (figure 7, page 1 paragraph 0010, page 3 paragraphs

0044-0045 and 0049. Luminosity values are compensated by filter and process

from analog value to digital values) indicating luminosity (page 3 paragraph

0044-0045, 0049. Brightness value, Bvd, is measure and calculated) of each of

pixels constituting the image; and

performing an image processing (figure 6 and page 3 paragraph 0045

shows processing of the image processing. Page 3 paragraph 0050 show

exposure value calculation procedure according to the brightness value Bvd.

Page 3 paragraph 0046 shows image processing as a display of the LCD panel

24) on each of the pixels of the image according to the evaluation value (figure 7,

page 1 paragraph 0010, page 3 paragraphs 0044-0045 and 0049. Luminosity

values are compensated by filter and process from analog value to digital values)

determined in the evaluation-value determining step (page 1 paragraphs 0007-

0008. The compensation amount determining system is the system that will carry

on the process like light meter measuring and exposure measuring).

Claim Rejections – 35 USC 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al

(US 2001/0003557 A1) in view of Kita (US 2002/0051569 A1).

(1) Regarding claim 3:

Hirai et al teaches all of the subject matter as describe in claim 1 above.

Hirai et al does not teach regarding smoothing processing of the image.

However, Kite teaches regarding the smoothing processing of the image

(page 3 paragraph 0038-0049).

It would have been obvious to one skill in the art at the time of the

invention to employ Katie teaching to Hirai et al regarding smoothing processing

of the image, such it would effectively reduce the coarse look of the image

without blurring (page 3 paragraph 0045), and greatly enhance with better

contrast, less of the coarse, and retain the sharpness of the image (page 3

paragraph 0048).

10.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al

(US 2001/0003557 A1) in view of Kimura (US Patent Number 6,333,792 B1).

(1) Regarding claim 5:

Hirai et al teaches all of the subject matter as describe in claim 1 above.

Hirai et al does not teach regarding a ratio of distance from a pixel and a predetermine point.

However, Kimura teaches ratio of distance from a pixel (page 1 lines 55-65) and a predetermine point (page 1 lines 55-65 show that there is a original pixel without the enlargement factor).

It would have been obvious to one skill in the art at the time of the invention to employ Kimura teachings to Hirai et al regarding ratio of distance from a pixel and a predetermine point, such that when enlargement operation is requested it will attain optimal enlargement by switching various interpolation schemes depending on the layout sate of the surrounding pixels (page 1 lines 60-65).

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kobayashi et al (US Patent Number 6,388,709 B1) disclose image sensing apparatus with optical modulation elements having transmission characteristics controllable by pixel.

Kawakami et al (US Patent Number 6,005,984) disclose process and apparatus for extracting and recognizing figure elements using division into receptive fields, polar

transformation, application of one-dimensional filter, and correlation between plurality of images.

Kawakami et al (US Patent Number 5,901,252) disclose Process and apparatus for extracting and recognizing figure elements using division into receptive fields, polar transformation, application of one-dimensional filter, and correlation between plurality of images.

Berlin, Jr et al (US Patent Number 4,677,576) disclose non-edge computer image generation system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tsung-Yin Tsai whose telephone number is (571) 270-1671. The examiner can normally be reached on Monday - Friday 8 am - 5 pm ESP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571)272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tsung-Yin Tsai
November 15, 2007

JINGGE WU
SUPERVISORY PATENT EXAMINER